

10533787

Connecting via Winsock to STN

Welcome to STN International! Enter x:X

LOGINID:ssspal604dxj

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page for STN Seminar Schedule - N. America
NEWS 2 NOV 21 CAS patent coverage to include exemplified prophetic
substances identified in English-, French-, German-,
and Japanese-language basic patents from 2004-present
NEWS 3 NOV 26 MARPAT enhanced with FSORT command
NEWS 4 NOV 26 CHEMSAFE now available on STN Easy
NEWS 5 NOV 26 Two new SET commands increase convenience of STN
searching
NEWS 6 DEC 01 ChemPort single article sales feature unavailable
NEWS 7 DEC 12 GBFULL now offers single source for full-text
coverage of complete UK patent families
NEWS 8 DEC 17 Fifty-one pharmaceutical ingredients added to PS
NEWS 9 JAN 06 The retention policy for unread STNmail messages
will change in 2009 for STN-Columbus and STN-Tokyo
NEWS 10 JAN 07 WPIDS, WPINDEX, and WPIX enhanced Japanese Patent
Classification Data
NEWS 11 FEB 02 Simultaneous left and right truncation (SLART) added
for CERAB, COMPUAB, ELCOM, and SOLIDSTATE
NEWS 12 FEB 02 GENBANK enhanced with SET PLURALS and SET SPELLING
NEWS 13 FEB 06 Patent sequence location (PSL) data added to USGENE
NEWS 14 FEB 10 COMPENDEX reloaded and enhanced
NEWS 15 FEB 11 WTEXTILES reloaded and enhanced
NEWS 16 FEB 19 New patent-examiner citations in 300,000 CA/Cplus
patent records provide insights into related prior
art
NEWS 17 FEB 19 Increase the precision of your patent queries -- use
terms from the IPC Thesaurus, Version 2009.01
NEWS 18 FEB 23 Several formats for image display and print options
discontinued in USPATFULL and USPAT2
NEWS 19 FEB 23 MEDLINE now offers more precise author group fields
and 2009 MeSH terms
NEWS 20 FEB 23 TOXCENTER updates mirror those of MEDLINE - more
precise author group fields and 2009 MeSH terms
NEWS 21 FEB 23 Three million new patent records blast AEROSPACE into
STN patent clusters
NEWS 22 FEB 25 USGENE enhanced with patent family and legal status
display data from INPADOCDB
NEWS 23 MAR 06 INPADOCDB and INPAFAMDB enhanced with new display
formats
NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.
NEWS HOURS STN Operating Hours Plus Help Desk Availability

Jagoe

10533787

NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 15:26:56 ON 09 MAR 2009

=> FIL REGISTRY	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	0.22	0.22

FILE 'REGISTRY' ENTERED AT 15:27:10 ON 09 MAR 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2009 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 8 MAR 2009 HIGHEST RN 1117698-24-4
DICTIONARY FILE UPDATES: 8 MAR 2009 HIGHEST RN 1117698-24-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

```
=> s strontium ranelate
      77648 STRONTIUM
        2 RANELATE
L1      1 STRONTIUM RANELATE
      (STRONTIUM(W)RANELATE)
```

```
=> s ranelate
L2      2 RANELATE
```

```
=> d 12 1-2
```

```
L2 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2009 ACS on STN
RN 135459-87-9 REGISTRY
ED Entered STN: 09 Aug 1991
```

Jagoe

CN 3-Thiopheneacetic acid, 5-[bis(carboxymethyl)amino]-2-carboxy-4-cyano-,
strontium salt (1:2) (CA INDEX NAME)

OTHER NAMES:

CN Distrontium renelate

CN Protelos

CN Protos

CN S 12911

CN S 12911-2

CN **Strontium ranelate**

MF C12 H10 N2 O8 S . 2 Sr

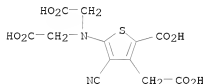
SR CA

LC STN Files: ADISINSIGHT, AGRICOLA, ANABSTR, BIOSIS, CA, CAPLUS, CASREACT,
CHEMCATS, CIN, EMBASE, IMSDRUGNEWS, IMSPATENTS, IMSPRODUCT, IMSRESEARCH,
IPA, MRCK*, PATDPASPC, PHAR, PROMT, PROUSDDR, SYNTHLINE, TOXCENTER,
USPAT2, USPATFULL

(*File contains numerically searchable property data)

Other Sources: WHO

CRN (135459-90-4)



● 2 Sr

173 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

173 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2009 ACS on STN

RM 58194-26-6 REGISTRY

ED Entered STN: 16 Nov 1984

CN 3-Thiopheneacetic acid, 5-[bis(2-ethoxy-2-oxoethyl)amino]-4-cyano-2-
(ethoxycarbonyl)-, ethyl ester (CA INDEX NAME)

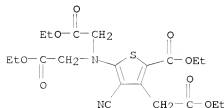
OTHER NAMES:

CN **Tetraethyl ranelate**

MF C20 H26 N2 O8 S

LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMCATS, TOXCENTER,
USPATFULL

(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7 REFERENCES IN FILE CA (1907 TO DATE)
7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file medicine

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS

SINCE FILE

ENTRY

TOTAL

SESSION

FULL ESTIMATED COST

21.11

21.33

FILE 'ADISCTI' ENTERED AT 15:28:07 ON 09 MAR 2009

COPYRIGHT (C) 2009 Adis Data Information BV

FILE 'ADISINSIGHT' ENTERED AT 15:28:07 ON 09 MAR 2009

COPYRIGHT (C) 2009 Adis Data Information BV

FILE 'ADISNEWS' ENTERED AT 15:28:07 ON 09 MAR 2009

COPYRIGHT (C) 2009 Adis Data Information BV

FILE 'BIOSIS' ENTERED AT 15:28:07 ON 09 MAR 2009

Copyright (c) 2009 The Thomson Corporation

FILE 'BIOTECHNO' ENTERED AT 15:28:07 ON 09 MAR 2009

COPYRIGHT (C) 2009 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'CAPLUS' ENTERED AT 15:28:07 ON 09 MAR 2009

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'DDFB' ENTERED AT 15:28:07 ON 09 MAR 2009

COPYRIGHT (C) 2009 THOMSON REUTERS

FILE 'DDFU' ACCESS NOT AUTHORIZED

FILE 'DGENE' ENTERED AT 15:28:07 ON 09 MAR 2009

COPYRIGHT (C) 2009 THOMSON REUTERS

FILE 'DISSABS' ENTERED AT 15:28:07 ON 09 MAR 2009

COPYRIGHT (C) 2009 ProQuest Information and Learning Company; All Rights Reserved.

FILE 'DRUGB' ENTERED AT 15:28:07 ON 09 MAR 2009

COPYRIGHT (C) 2009 THOMSON REUTERS

FILE 'DRUGMONOG2' ENTERED AT 15:28:07 ON 09 MAR 2009

COPYRIGHT (C) 2009 IMSWORLD Publications Ltd

FILE 'DRUGU' ENTERED AT 15:28:07 ON 09 MAR 2009

COPYRIGHT (C) 2009 THOMSON REUTERS

FILE 'EMBAL' ENTERED AT 15:28:07 ON 09 MAR 2009

Copyright (c) 2009 Elsevier B.V. All rights reserved.

FILE 'EMBASE' ENTERED AT 15:28:07 ON 09 MAR 2009

Copyright (c) 2009 Elsevier B.V. All rights reserved.

FILE 'ESBIOBASE' ENTERED AT 15:28:07 ON 09 MAR 2009

COPYRIGHT (C) 2009 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'IFIPAT' ENTERED AT 15:28:07 ON 09 MAR 2009
COPYRIGHT (C) 2009 IFI CLAIMS(R) Patent Services (IFI)

FILE 'IMSDRUGNEWS' ENTERED AT 15:28:07 ON 09 MAR 2009
COPYRIGHT (C) 2009 IMSWORLD Publications Ltd

FILE 'IMSPRODUCT' ENTERED AT 15:28:07 ON 09 MAR 2009
COPYRIGHT (C) 2009 IMSWORLD Publications Ltd

FILE 'IPA' ENTERED AT 15:28:07 ON 09 MAR 2009
Copyright (c) 2009 The Thomson Corporation

FILE 'KOSMET' ENTERED AT 15:28:07 ON 09 MAR 2009
COPYRIGHT (C) 2009 International Federation of the Societies of Cosmetics Chemists

FILE 'LIFESCI' ENTERED AT 15:28:07 ON 09 MAR 2009
COPYRIGHT (C) 2009 Cambridge Scientific Abstracts (CSA)

FILE 'MEDLINE' ENTERED AT 15:28:07 ON 09 MAR 2009

FILE 'NAPRALERT' ENTERED AT 15:28:07 ON 09 MAR 2009
COPYRIGHT (C) 2009 Board of Trustees of the University of Illinois,
University of Illinois at Chicago.

FILE 'NLDB' ENTERED AT 15:28:07 ON 09 MAR 2009
COPYRIGHT (C) 2009 Gale Group. All rights reserved.

FILE 'NUTRACEUT' ENTERED AT 15:28:07 ON 09 MAR 2009
Copyright 2009 (c) MARKETLETTER Publications Ltd. All rights reserved.

FILE 'PASCAL' ENTERED AT 15:28:07 ON 09 MAR 2009
Any reproduction or dissemination in part or in full,
by means of any process and on any support whatsoever
is prohibited without the prior written agreement of INIST-CNRS.
COPYRIGHT (C) 2009 INIST-CNRS. All rights reserved.

FILE 'PCTGEN' ENTERED AT 15:28:07 ON 09 MAR 2009
COPYRIGHT (C) 2009 WIPO

FILE 'PHARMAML' ENTERED AT 15:28:07 ON 09 MAR 2009
Copyright 2009 (c) MARKETLETTER Publications Ltd. All rights reserved.

FILE 'PHIN' ENTERED AT 15:28:07 ON 09 MAR 2009
COPYRIGHT (C) 2009 Informa UK Ltd.

FILE 'SCISEARCH' ENTERED AT 15:28:07 ON 09 MAR 2009
Copyright (c) 2009 The Thomson Corporation

FILE 'TOXCENTER' ENTERED AT 15:28:07 ON 09 MAR 2009
COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USGENE' ENTERED AT 15:28:07 ON 09 MAR 2009
COPYRIGHT (C) 2009 SEQUENCEBASE CORP

FILE 'USPATFULL' ENTERED AT 15:28:07 ON 09 MAR 2009
CA INDEXING COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATOLD' ENTERED AT 15:28:07 ON 09 MAR 2009
CA INDEXING COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 15:28:07 ON 09 MAR 2009
CA INDEXING COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

=> s 12 or ranelate
L3 2655 L2 OR RANELATE

=> s protelos or protos
L4 1034 PROTELOS OR PROTOS

=> s 13 or 14
L5 3305 L3 OR L4

=> s pain or ?itis
LEFT TRUNCATION IGNORED FOR FILE 'ADISINSIGHT'
LEFT TRUNCATION IGNORED FOR FILE 'ADISNEWS'
5 FILES SEARCHED...
LEFT TRUNCATION IGNORED FOR FILE 'DDEFB'
LEFT TRUNCATION IGNORED FOR FILE 'DGENE'
LEFT TRUNCATION IGNORED FOR FILE 'DRUGB'
LEFT TRUNCATION IGNORED FOR FILE 'DRUGMONOG2'
LEFT TRUNCATION IGNORED FOR FILE 'DRUGU'

15 FILES SEARCHED...
LEFT TRUNCATION IGNORED FOR FILE 'IMSDRUGNEWS'
LEFT TRUNCATION IGNORED FOR FILE 'IPA'
LEFT TRUNCATION IGNORED FOR FILE 'LIFESCI'
LEFT TRUNCATION IGNORED FOR FILE 'HLDB'
LEFT TRUNCATION IGNORED FOR FILE 'NUTRACEUT'

26 FILES SEARCHED...
LEFT TRUNCATION IGNORED FOR FILE 'PCTGEN'
LEFT TRUNCATION IGNORED FOR FILE 'PHARMAML'

31 FILES SEARCHED...
LEFT TRUNCATION IGNORED FOR FILE 'USPATFULL'
LEFT TRUNCATION IGNORED FOR FILE 'USPATFULL'
LEFT TRUNCATION IGNORED FOR FILE 'USPATFULL'
LEFT TRUNCATION IGNORED FOR FILE 'USPATOLD'
LEFT TRUNCATION IGNORED FOR FILE 'USPATOLD'
LEFT TRUNCATION IGNORED FOR FILE 'USPATOLD'
LEFT TRUNCATION IGNORED FOR FILE 'USPAT2'
LEFT TRUNCATION IGNORED FOR FILE 'USPAT2'
LEFT TRUNCATION IGNORED FOR FILE 'USPAT2'

L6 8213771 PAIN OR ?ITIS

Left truncation is not valid in the specified search field in the specified file. The term has been searched without left truncation. Examples: '?TERPEN?' would be searched as 'TERPEN?' and '?FLAVONOID' would be searched as 'FLAVONOID.'

If you are searching in a field that uses implied proximity, and you used a truncation symbol after a punctuation mark, the system may interpret the truncation symbol as being at the beginning of a term. Implied proximity is used in search fields indexed as single words, for example, the Basic Index.

=> s 15 and 16

L7 519 L5 AND L6

=> s 17 and pd<2003

5 FILES SEARCHED...
 '2003' NOT A VALID FIELD CODE
 '2003' NOT A VALID FIELD CODE
 '2003' NOT A VALID FIELD CODE
 15 FILES SEARCHED...
 '2003' NOT A VALID FIELD CODE
 22 FILES SEARCHED...
 '2003' NOT A VALID FIELD CODE
 28 FILES SEARCHED...
 '2003' NOT A VALID FIELD CODE
 31 FILES SEARCHED...
 L8 17 L7 AND PD<2003

=> dup rem
 ENTER L# LIST OR (END):18
 DUPLICATE IS NOT AVAILABLE IN 'ADISINSIGHT, ADISNEWS, DGENE, DRUGMONOG2,
 IMSPRODUCT, KOSMET, NUTRACEUT, PCTGEN, PHARMAML, USGENE'.
 ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
 PROCESSING COMPLETED FOR L8
 L9 13 DUP REM L8 (4 DUPLICATES REMOVED)

=> d 19 1-13 ibib, kwic

L9 ANSWER 1 OF 13 USPATFULL on STN
 ACCESSION NUMBER: 2002:343531 USPATFULL
 TITLE: Soluble lymphotoxin beta receptor and anti-lymphotoxin
 receptor and ligand antibodies as therapeutic agents
 for treatment
 INVENTOR(S): Browning, Jeffrey L., Brookline, MA, UNITED STATES
 Hochman, Paula S., Newton, MA, UNITED STATES
 Rennert, Paul D., Millis, MA, UNITED STATES
 MacKay, Fabienne, Vaucluse, AUSTRALIA

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20020197254	A1	20021226	<--
	US 7309492	B2	20071218	
APPLICATION INFO.:	US 2001-3211	A1	20011031	(10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1999-299139, filed on 23 Apr 1999, PENDING			

	NUMBER	DATE
PRIORITY INFORMATION:	WO 1997-US19436	19971024
	US 1996-29060P	19961025 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Niki D. Cox, Esq., BIOGEN, INC., 14 Cambridge Center, Cambridge, MA, 02142	
NUMBER OF CLAIMS:	50	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	10 Drawing Page(s)	
LINE COUNT:	2115	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

SUMM . . . which in turn activates mast cells to produce acute
 inflammatory reactions such as those which lead to eczema, asthma and
rhinitis.
 SUMM . . . immune responses are associated with a number of organ-specific
 and systemic autoimmune conditions such as Systemic Lupus Erythematosus,

Wegener's Granulomatosis, Polyarteritis Nodosa (PAN), Rapidly Progressive Crescentic Glomerulonephritis and Idiopathic Thrombocytopenia Purpura, as well as chronic inflammatory diseases such as the Graves' and Chagas' disease. Humoral immune responses. . .

DETD . . . caused by molecular mimicry. For example, the immune reaction to the Lyme disease infectious agent *Borrelia burgdorferi* leads to an arthritis-like disease presumably because some antigenic epitope on this bacterium resembles a normal joint component. Removal of the FDC-retained Lyme bacterium antigen may ameliorate Lyme disease induced arthritis. Such therapy would also be relevant to other cases of mimicry associated with infectious agents.

DETD . . . Miller et al., J. Exp. Med., 178, pp. 211-222 (1993)). Purified human IgG1 used as a control was purchased from Protos Immunoresearch (San Francisco, Calif.). MR1, anti-mouse CD40 ligand antibody, was purchased from Pharmingen (San Diego, Calif.).

DETD . . . include: Myasthenia Gravis, autoimmune hemolytic anemia, Chagas' disease, Grave's disease, idiopathic thrombocytopenia purpura (ITP) Systemic Lupus Erythematosus (SLE), Wegener's Granulomatosis, Poly-arteritis Nodosa and Rapidly Progressive Crescentic Glomerulonephritis. (From Benjamini, et al. Immunology, A Short Course, (Wiley-Liss, New York 3d ed. (1996)) Although the etiology of SLE is. . . in joint synovial spaces. These complexes activate the complement cascade and attract granulocytes. The subsequent inflammatory reaction is characterized as glomerulonephritis, with resulting damage to the kidneys leading to proteinuria and hematuria.

DETD [0174] Lupus nephritis has been studied in murine models for decades. Recently, the therapeutic efficacy of a reagent specific for the murine CD40. . .

DETD . . . of activation, and damage from the release of lytic enzymes from their granules results in the destruction of cells. Rheumatic arthritis is thought to result from a type III hypersensitivity reaction mediated by immune complexes of antigen (in this case rheumatoid. . .

DETD . . . reagent which inhibits antibody responses to ameliorate a pathologic immunological response is supported in the recent study of mouse lupus nephritis. In the latter study, administration of an antibody that blocks the CD40/CD40L pathway was shown inhibit the acceleration of lupus nephritis produced upon transfer of cells which induce the production of pathogenic antibodies in vivo, and have a sustained beneficial effect. . .

L9 ANSWER 2 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2002:272935 USPATFULL
 TITLE: Novel differentiation inducing process of embryonic stem cell to ectodermal cell and its use
 INVENTOR(S): Sasai, Yoshiki, Kyoto, JAPAN
 Nishikawa, Shin-Ichi, Kyoto, JAPAN

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20020151056	A1	20021017	<--
APPLICATION INFO.:	US 2001-855587	A1	20010516	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2000-144059	20000516
	JP 2000-290819	20000925
	US 2000-257049P	20001220 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	

LEGAL REPRESENTATIVE: FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER
PLAZA, NEW YORK, NY, 10112
NUMBER OF CLAIMS: 71
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Page(s)
LINE COUNT: 4056
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . so far been established in rat (P. M. Iannaccone et al., Dev.
Biol., 163, 288 (1994)), in domestic fowl (B. Pain et al.,
Development, 122, 2339 (1996); U.S. Pat. No. 5,340,740; U.S. Pat. No.
5,656,479), in pig (M. B. Wheeler, Reprod. . . .
DETD . . . serotonergic neuron marker serotonin (manufactured by Dia
Sorin) or an antibody against a noradrenaline neuron marker dopamine
 β -hydroxylase (manufactured by PROTOS Biotech).

L9 ANSWER 3 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2002:243628 USPATFULL
TITLE: Novel purinse
INVENTOR(S): Metcalf, Chester A., III, Boston, MA, UNITED STATES
Weigels, Manfred, Cambridge, MA, UNITED STATES
Sawyer, Tomi K., Southborough, MA, UNITED STATES
Bohacek, Regine, Boston, MA, UNITED STATES
Shakespeare, William C., Framingham, MA, UNITED STATES
Sundaramoorthi, Rajeswari, Watertown, MA, UNITED STATES
Wang, Yihan, Newton, MA, UNITED STATES
Dalgarno, David C., Brookline, MA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20020132819	A1	20020919	<--
APPLICATION INFO.:	US 2000-740653	A1	20001218	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-172510P	19991217 (60)
	US 1999-172161P	19991217 (60)
	US 2000-240788P	20001016 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Karoline Shair, Ph.D., Choate, Hall & Stewart, 53 State
Street, Exchange Place, Boston, MA, 02109
NUMBER OF CLAIMS: 195
EXEMPLARY CLAIM: 1
LINE COUNT: 4673
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . limited to, Paget's Disease, primary and secondary
hyperparathyroidism, humoral hypercalcemia of malignancy, various
cancers where resorption is increased, and rheumatoid arthritis
.
SUMM . . . fast increase in bone mineral content by promoting osteoblast
activity. Such examples include peptides from the parathyroid hormone
family, strontium canalate, and growth hormone and
insulin-like growth response (see, for example, Register et al.
"Promising New Agents in Osteoporosis," Drugs R. . . .

L9 ANSWER 4 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2002:192090 USPATFULL
TITLE: Novel heterocycles

INVENTOR(S): Weigele, Manfred, Cambridge, MA, UNITED STATES
 Luke, George P., Clinton, CT, UNITED STATES
 Sawyer, Tomi K., Southborough, MA, UNITED STATES
 Bohacek, Regine, Boston, MA, UNITED STATES
 Shakespeare, William C., Framingham, MA, UNITED STATES
 Sundaramoorthi, Rajeswari, Watertown, MA, UNITED STATES
 Wang, Yihan, Newton, MA, UNITED STATES
 Dalgarno, David C., Brookline, MA, UNITED STATES
 Metcalf, Chester A., III, Boston, MA, UNITED STATES
 Vu, Chi B., Arlington, MA, UNITED STATES
 Kawahata, Noriyuki H., Medford, MA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20020103161	A1	20020801	<--
APPLICATION INFO.:	US 2000-740267	A1	20001218	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-172510P	19991217 (60)
	US 1999-172161P	19991217 (60)
	US 2000-240788P	20001016 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Karoline K.M. Shair, Ph.D., Choate, Hall & Stewart, 53 State Street, Exchange Place, Boston, MA, 02109	
NUMBER OF CLAIMS:	111	
EXEMPLARY CLAIM:	1	
LINE COUNT:	4552	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

SUMM . . . limited to, Paget's Disease, primary and secondary hyperparathyroidism, humoral hypercalcemia of malignancy, various cancers where resorption is increased, and rheumatoid arthritis

SUMM . . . fast increase in bone mineral content by promoting osteoblast activity. Such examples include peptides from the parathyroid hormone family, strontium ranelate, and growth hormone and insulin-like growth response (see, for example, Reginster et al. "Promising New Agents in Osteoporosis," Drugs R. . .

SUMM . . . sterile isotonic aqueous buffer. Where necessary, the composition may also include a solubilizing agent and a local anesthetic to ease pain at the side of the injection. Generally, the ingredients are supplied either separately or mixed together in unit dosage form. . . .

L9 ANSWER 5 OF 13 USPATFULL on STN
 ACCESSION NUMBER: 2002:191593 USPATFULL
 TITLE: Human monoclonal antibody against a costimulatory signal transduction molecule AILIM and pharmaceutical use thereof

INVENTOR(S): Tsuji, Takashi, Nagareyama-shi, JAPAN
 Tezuka, Katsunari, Yokohama-shi, JAPAN
 Hori, Nobuaki, Yokohama-shi, JAPAN

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20020102658	A1	20020801	<--
	US 6803039	B2	20041012	
APPLICATION INFO.:	US 2001-859053	A1	20010516	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2000-147116	20000518
	JP 2001-99508	20010330
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	JANIS K. FRASER, PH.D., J.D., Fish & Richardson P.C., 225 Franklin Street, Boston, MA, 02110-2804	
NUMBER OF CLAIMS:	108	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	78 Drawing Page(s)	
LINE COUNT:	6932	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

SUMM . . . of pharmaceutical compositions according to this invention enables suppression, prevention and/or treatment of, for example, various disorders (for example, rheumatoid arthritis, multiple sclerosis, autoimmune thyroiditis, allergic contact-type dermatitis, chronic inflammatory dermatosis such as lichen planus, systemic lupus erythematosus, insulin-dependent diabetes mellitus, psoriasis, etc.) classified into autoimmune or allergic disorders (particularly autoimmune disease and delayed allergy caused by cellular immunity); arthropathia (for example, rheumatoid arthritis (RA) and osteoarthritis (OA)), inflammation (e.g., hepatitis); graft versus host reaction (GVH reaction); graft versus host disease (GVHD); immune rejection accompanying transplantation (homoplasty or heteroplasty) of a . . . of cytokines); and disorders possibly caused by the abnormal intestinal immunity (specifically inflammatory intestinal disorders (particularly clone disease and ulcerative colitis) and alimentary allergy).

SUMM [0030] The pharmaceutical composition of the present invention can be applied to inflammatory disease for example, inflammation accompanying various arthritis (for example, rheumatoid arthritis, osteoarthritis), pneumonia, hepatitis (including viral hepatitis), inflammation accompanying infectious diseases, inflammatory bowel diseases, intestinal enteritis, nephritis (inflammation accompanying glomerular nephritis, nephrofibrosis), gastritis, angitis, pancreatitis, peritonitis, bronchitis, myocarditis, cerebritis, inflammation in postischemic reperfusion injury (myocardial ischemic reperfusion injury), inflammation attributed to immune rejection after transplantation of tissue and organ, burn, various skin inflammation (psoriasis, allergic contact-type dermatitis, lichen planus which is chronic inflammatory skin disease), inflammation in multiple organ failure, inflammation after operation of PTCA or PTCR, and inflammation accompanying arteriosclerosis, and autoimmune thyroiditis.

DETD . . . an active ingredient, it is possible to inhibit or treat and prevent, for example, a variety of diseases (e.g., rheumatoid arthritis, multiple sclerosis, autoimmune thyroiditis, allergic contact dermatitis, lichen planus as a chronic inflammatory skin disease, systemic lupus erythematosus, insulin dependent diabetes mellitus and psoriasis, etc.) classified into autoimmune diseases or allergic diseases (particularly, autoimmune diseases and delayed allergies by cellular immunity); arthropathies (e.g., rheumatoid arthritis (RA), osteoarthritis (OA)), inflammation (e.g., hepatitis); graft versus host reaction (GVH reaction); graft versus host disease (graft versus host

disease; GVHD); immunorejection associated with transplantation (allogenic. . . and diseases that are potentially caused by abnormality in gut immunity (specifically, inflammatory bowel disease (particularly, Crohn's disease and ulcerative colitis); and alimentary allergy, etc.

DETD . . . some inflammations for which various steroidal drugs are used as anti-inflammatory drugs, for example, inflammation associated with various arthritides (rheumatoid arthritis, osteoarthritis, etc.), pneumonia, hepatitis (including viral hepatitis), inflammation associated with infectious diseases, inflammatory bowel disease, enteritis, nephritis (glomerular nephritis, inflammation associated with kidney fibrosis, gastritis, vasculitis, pancreatitis, peritonitis, bronchitis, myocarditis, encephalitis, inflammation associated with ischemia-reperfusion injury (myocardial ischemia-reperfusion injury, etc.), inflammation associated with immunorejection after transplantation of tissues or organs, scald, various skin inflammations (psoriasis, allergic contact dermatitis, lichen planus as a chronic inflammatory skin disease), inflammation associated with multiple organ failure, inflammation after operation of PTCA or PTCR, and inflammation associated with atherosclerosis, autoimmune thyroiditis, etc.

DETD [1008] Biotin-labeled anti-human IgG antibody (Protos);

DETD [1041] Subsequently, peroxidase-conjugated goat anti-human IgG/k antibody was added to each well (4,000 times diluted, 100 µl/well, Protos), and the plate was incubated at room temperature for 1 hour.

L9 ANSWER 6 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2002:133863 USPATFULL

TITLE: Purine derivatives

INVENTOR(S): Weigle, Manfred, Cambridge, MA, UNITED STATES
Sawyer, Tomi K., Southborough, MA, UNITED STATES
Bohacek, Regine, Boston, MA, UNITED STATES
Shakespeare, William C., Framingham, MA, UNITED STATES
Sundaramoorthi, Rajeswari, Watertown, MA, UNITED STATES
Wang, Yihan, Newton, MA, UNITED STATES
Dalgarno, David C., Brookline, MA, UNITED STATES
Metcalf, Chester A., III, Boston, MA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20020068721	A1	20020606	<--
	US 7115589	B2	20061003	
APPLICATION INFO.:	US 2000-740393	A1	20001218	(9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-740267, filed on 18 Dec 2000, PENDING Continuation-in-part of Ser. No. US 2000-740653, filed on 18 Dec 2000, PENDING			

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-240788P	20001016 (60)
	US 1999-172161P	19991217 (60)
	US 1999-172510P	19991217 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: David L. Berstein, ARIAD Pharmaceuticals, Inc., 26 Landsdowne Street, Cambridge, MA, 02139-4234

NUMBER OF CLAIMS: 46

EXEMPLARY CLAIM: 1
 LINE COUNT: 3811
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . limited to, Paget's Disease, primary and secondary hyperparathyroidism, humoral hypercalcemia of malignancy, various cancers where resorption is increased, and rheumatoid arthritis
 .
 SUMM . . . fast increase in bone mineral content by promoting osteoblast activity. Such examples include peptides from the parathyroid hormone family, strontium ranelate, and growth hormone and insulin-like growth response (see, for example, "Promising New Agents in Osteoporosis", Reginster et al. Drugs R. . .

L9 ANSWER 7 OF 13 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2002177679 EMBASE
 TITLE: Strontium ranelate: Dose-dependent effects in established postmenopausal vertebral osteoporosis - A 2-year randomized placebo controlled trial.
 AUTHOR: Meunier, Pierre J., Dr. (correspondence); Slosman, D.O.; Delmas, P.D.; Sebert, J.L.; Brandi, M.L.; Albanese, C.; Lorenc, R.; Pors-Nielsen, S.; De Vernejoul, M.C.; Roces, A.; Reginster, J.Y.
 CORPORATE SOURCE: Hopital Edouard Herriot, 69437 Lyon Cedex 03, France. Meunier@lyon151.inserm.fr
 SOURCE: Journal of Clinical Endocrinology and Metabolism, (2002) Vol. 87, No. 5, pp. 2060-2066.
 Refs: 24
 ISSN: 0021-972X CODEN: JCEMAZ
 COUNTRY: United States
 DOCUMENT TYPE: Journal; Article
 FILE SEGMENT: 017 Public Health, Social Medicine and Epidemiology
 003 Endocrinology
 033 Orthopedic Surgery
 037 Drug Literature Index
 038 Adverse Reactions Titles
 LANGUAGE: English
 SUMMARY LANGUAGE: English
 ENTRY DATE: Entered STN: 6 Jun 2002
 Last Updated on STN: 6 Jun 2002

TI Strontium ranelate: Dose-dependent effects in established postmenopausal vertebral osteoporosis - A 2-year randomized placebo controlled trial.
 SO Journal of Clinical Endocrinology and Metabolism, (2002) Vol. 87, No. 5, pp. 2060-2066.
 Refs: 24
 ISSN: 0021-972X CODEN: JCEMAZ
 AB The aim of the strontium ranelate (SR) for treatment of osteoporosis (STRATOS) trial was to investigate the efficacy and safety of different doses of SR, a. . .
 CT Medical Descriptors:
abdominal pain: SI, side effect
 adult
 aged
 alkaline phosphatase blood level
 arthralgia: SI, side effect
 article
 asthenia: SI, side effect
 backache: SI, side effect

bone density
 bone metabolism
 bone mineral
bronchitis: SI, side effect
 clinical trial
 confidence interval
 controlled study
 coughing: SI, side effect
 dose response
 double blind procedure
 drug efficacy
 drug safety
 drug tolerability
 dual energy X ray absorptiometry
 female
 gastrointestinal symptom: SI, side effect
 human
 hypertension: SI, side effect
 lumbar spine
 major clinical study
 multicenter study
 myalgia: SI, side effect
 neuralgia: SI, side effect
 osteolysis
 outcomes research
pharyngitis: SI, side effect
 *postmenopause osteoporosis: DT, drug therapy
 priority journal
 randomized controlled trial
rhinitis: SI, side effect
 vertebra fracture
 vertebra malformation
 vertigo: SI, side effect
 alkaline phosphatase: EC, endogenous compound
 amino terminal telopeptide: EC, endogenous compound
 peptide: EC, endogenous compound
 *strontium: AE, adverse drug reaction
 *strontium: CT, clinical trial
 *strontium: DO, drug dose
 *strontium: DT, drug therapy
*strontium ranelate: AE, adverse drug reaction
*strontium ranelate: CT, clinical trial
*strontium ranelate: DO, drug dose
*strontium ranelate: DT, drug therapy
 unclassified drug
 RN (alkaline phosphatase) 9001-78-9; (strontium ranelate)
135459-87-9; (strontium) 7440-24-6

L9 ANSWER 8 OF 13 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2002221691 EMBASE
 TITLE: Treatment of postmenopausal osteoporosis.
 AUTHOR: Delmas, Pierre D., Dr. (correspondence)
 CORPORATE SOURCE: Claude Bernard University of Lyon, France. delmas@lyon151.inserm.fr
 AUTHOR: Delmas, Pierre D., Dr. (correspondence)
 CORPORATE SOURCE: INSERM Research Unit 403, Lyon, France. delmas@lyon151.inserm.fr
 AUTHOR: Delmas, Pierre D., Dr. (correspondence)
 CORPORATE SOURCE: Hopital e Herriot, Pavillon F, 69437 Lyon Cedex 03, France.

delmas@lyon151.inserm.fr
 AUTHOR: Delmas, Pierre D., Dr. (correspondence)
 CORPORATE SOURCE: Hopital E Herriot, Pavillon F, 69437 Lyon Cedex 03, France.
 delmas@lyon151.inserm.fr
 SOURCE: Lancet, (8 Jun 2002) Vol. 359, No. 9322, pp. 2018-2026.
 Refs: 111
 ISSN: 0140-6736 CODEN: LANCAO
 COUNTRY: United Kingdom
 DOCUMENT TYPE: Journal; Article
 FILE SEGMENT: 010 Obstetrics and Gynecology
 030 Clinical and Experimental Pharmacology
 033 Orthopedic Surgery
 037 Drug Literature Index
 038 Adverse Reactions Titles
 LANGUAGE: English
 SUMMARY LANGUAGE: English
 ENTRY DATE: Entered STN: 11 Jul 2002
 Last Updated on STN: 11 Jul 2002
 SO Lancet, (8 Jun 2002) Vol. 359, No. 9322, pp. 2018-2026.
 Refs: 111
 ISSN: 0140-6736 CODEN: LANCAO
 CT Medical Descriptors:
 age
 article
 bone density
 bone mineral
 calcium intake
 clinical trial
 cognitive defect: SI, side effect
 diarrhea: SI, side effect
 diet
 drug efficacy
 drug induced disease: SI, side effect
 elderly care
esophagitis: SI, side effect
 exercise
 falling
 flushing
 *fracture: DT, drug therapy
 *fracture: PC, prevention
 gastrointestinal disease: SI, side effect
 *hip fracture: DT, drug therapy
 *hip fracture: PC, prevention
 hormone substitution
 human
 morbidity
 nausea: . . .
 DO, drug dose
 risedronic acid: DT, drug therapy
 risedronic acid: PD, pharmacology
 selective estrogen receptor modulator: DT, drug therapy
 selective estrogen receptor modulator: PD, pharmacology
strontium ranelate: DV, drug development
 tamoxifen: DT, drug therapy
 tamoxifen: PD, pharmacology
 thiazide diuretic agent
 tibolone: DT, drug therapy
 tibolone: PD, pharmacology
 tiludronic acid: DT, drug therapy

tiludronic. . .
 RN. . . acid) 40391-99-9, 57248-88-1; (parathyroid hormone) 12584-96-2,
 68893-82-3, 9002-64-6; (parathyroid hormone[1-34]) 12583-68-5, 52232-67-4;
 (raloxifene) 82640-04-8, 84449-90-1; (risedronic acid) 105462-24-6,
 122458-82-6; (strontium **anelate**) **135459-87-9**;
 (tamoxifen) 10540-29-1; (tibolone) 5630-53-5; (tiludronic acid)
 96538-83-9; (vitamin K group) 12001-79-5; (zoledronic acid) 118072-93-8,
 131654-46-1, 165800-06-6, 165800-07-7

L9 ANSWER 9 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2001:22352 USPATFULL
 TITLE: Methods to improve neural outcome
 INVENTOR(S): Gluckman, Peter D., Auckland, New Zealand
 Williams, Christopher E., Auckland, New Zealand
 Guan, Jian, Auckland, New Zealand
 PATENT ASSIGNEE(S): Auckland Uniservices Limited, Auckland, New Zealand
 (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6187906	BI	20010213	<--
APPLICATION INFO.:	US 1999-332868		19990615	(9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1997-907918, filed on 11 Aug 1997			

	NUMBER	DATE
PRIORITY INFORMATION:	NZ 1998-330684	19980615
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Low, Christopher S. F.	
LEGAL REPRESENTATIVE:	Nixon & Vanderhye	
NUMBER OF CLAIMS:	11	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	18 Drawing Figure(s); 9 Drawing Page(s)	
LINE COUNT:	1057	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

SUMM . . . insults associated with near-miss drowning, near-miss cot death, carbon monoxide inhalation, ammonia or other gaseous intoxication, cardiac arrest, collapse, coma, meningitis, hypoglycaemia and status epilepticus; episodes of cerebral asphyxia associated with coronary bypass surgery; cerebral anoxia or ischemia associated with stroke, . . .

DETD . . . O.sub.2 for 20 minutes, washed with 0.1M PBS (3+5 minutes) and incubated with rabbit polyclonal antisera raised against tyrosine hydroxylase (**Protos** Biotech, USA) diluted 1:500 with 1% goat serum for 48 hours at 4° C. The sections were washed in PBS. . .

L9 ANSWER 10 OF 13 SCISEARCH COPYRIGHT (c) 2009 The Thomson Corporation on STN

ACCESSION NUMBER: 2001:388795 SCISEARCH
 THE GENUINE ARTICLE: 429BP
 TITLE: Incorporation and distribution of strontium in bone
 AUTHOR: Dahl S G (Reprint)
 CORPORATE SOURCE: Univ Tromso, Fac Med, Dept Pharmacol, N-9037 Tromso, Norway (Reprint)
 AUTHOR: Allain P; Marie P J; Mauras Y; Boivin G; Ammann P; Tsouderos Y; Delmas P D; Christiansen C

CORPORATE SOURCE: CHU Angers, Lab Pharmacol & Toxicol, Angers, France; CNRS, Lariboisiere Hosp, INSERM, U349, Paris, France; Fac Med R Laennec, INSERM, U403, Lyon, France; Univ Geneva, Hop Cantonal, Div Malad Osseuses, Dept Med Interne, CH-1211 Geneva, Switzerland; Inst Rech Int Servier, F-92415 Courbevoie, France; Ctr Clin & Basic Res, Ballerup, Denmark

COUNTRY OF AUTHOR: Norway; France; Switzerland; Denmark

SOURCE: BONE, (APR 2001) Vol. 28, No. 4, pp. 446-453. ISSN: 8756-3282.

PUBLISHER: ELSEVIER SCIENCE INC, 655 AVENUE OF THE AMERICAS, NEW YORK, NY 10010 USA.

DOCUMENT TYPE: Article; Journal

LANGUAGE: English

REFERENCE COUNT: 77

ENTRY DATE: Entered STN: 25 May 2001
Last Updated on STN: 25 May 2001
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

SO BONE, (APR 2001) Vol. 28, No. 4, pp. 446-453. ISSN: 8756-3282.

AB . . . into bone has been examined in rats, monkeys, and humans after oral administration of strontium (either strontium chloride or strontium anelate). After repeated administration for a sufficient period of time (at least 4 weeks in rats), strontium incorporation into bone reaches. . .

STP KeyWords Plus (R): POSTMENOPAUSAL OSTEOPOROSIS; CALCIUM-METABOLISM; MINERAL DENSITY; ILIAC BONE; RATS; FLUORIDE; RESORPTION; ARTHRITIS; TURNOVER; SKELETON

L9 ANSWER 11 OF 13 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN

ACCESSION NUMBER: 2001:550064 BIOSIS

DOCUMENT NUMBER: PREV200100550064

TITLE: Strontium anelate increases cartilage matrix formation.

AUTHOR(S): Henrotin, Y. [Reprint author]; Labasse, A. [Reprint author]; Galais, Ph.; Tscouderos, Y.; Crielaard, J. M. [Reprint author]; Reginster, J. Y. [Reprint author]

CORPORATE SOURCE: Bone and Cartilage Metabolism Research Unit, University Hospital, CHU Sart-Tilman, 4000, Liege, Belgium

SOURCE: Clinical Rheumatology, (2001) Vol. 20, No. 5, pp. 416. print.
Meeting Info.: 5th Belgian Congress on Rheumatology. Hasselt, Belgium. September 27-29, 2001.
CODEN: CLRHD6. ISSN: 0770-3198.

DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 21 Nov 2001
Last Updated on STN: 25 Feb 2002

TI Strontium anelate increases cartilage matrix formation.

SO Clinical Rheumatology, (2001) Vol. 20, No. 5, pp. 416. print.
Meeting Info.: 5th Belgian Congress on Rheumatology. Hasselt, Belgium. September 27-29, 2001.
CODEN: . . .

IT . . .
(Movement and Support)

IT Parts, Structures, & Systems of Organisms
cartilage: skeletal system, matrix formation; chondrocytes: skeletal system

IT Diseases

osteoarthritis: joint diseaseOsteoarthritis (MeSH)

IT Chemicals & Biochemicals

insulin-like growth factor-I; interleukin-1 beta; proteoglycans:

production; stromelysin: activation; strontium ranelate:

antiarthritic-drug

L9 ANSWER 12 OF 13 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on
STN DUPLICATE 1

ACCESSION NUMBER: 2001:120190 BIOSIS

DOCUMENT NUMBER: PREV200100120190

TITLE: Strontium ranelate increases cartilage matrix
formation.AUTHOR(S): Henrotin, Y. [Reprint author]; Labasse, A.; Zheng, S. X.;
Galais, Ph.; Tzouderos, Y.; Crielaard, J. M.; Reginster, J.
Y.CORPORATE SOURCE: Bone and Cartilage Metabolism Research Unit Institute of
Pathology, C.H.U. Sart-Tilman, Bat B23, B-4000, Liege,
BelgiumSOURCE: Journal of Bone and Mineral Research, (February,
2001) Vol. 16, No. 2, pp. 299-308. print.
CODEN: JBMREJ. ISSN: 0884-0431.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 7 Mar 2001

Last Updated on STN: 15 Feb 2002

TI Strontium ranelate increases cartilage matrix formation.SO Journal of Bone and Mineral Research, (February, 2001) Vol. 16,
No. 2, pp. 299-308. print.

CODEN: JBMREJ. ISSN: 0884-0431.

AB Based on previous studies showing that strontium ranelate (S12911) modulates bone loss in osteoporosis, it could be hypothesized that this drug also is effective on cartilage degradation in osteoarthritis (OA). This was investigated in vitro on normal and OA human chondrocytes treated or not treated with interleukin-1beta (IL-1beta). This. . . in OA cartilage. Chondrocytes were isolated from cartilage by enzymatic digestion and cultured for 24-72 h with 10⁻⁴-10⁻³ M strontium ranelate, 10⁻³ M calcium ranelate, or 2.10⁻³ M SrCl₂ with or without IL-1beta or insulin-like growth factor I (IGF-I). Stromelysin activity and stromelysin quantitation were. . . were quantified by labeled sulfate (Na²³⁵SO₄) incorporation. This method allowed the PG size after exclusion chromatography to be determined. Strontium ranelate, calcium ranelate, and SrCl₂ did not modify stromelysin synthesis even in the presence of IL-1beta. Calcium ranelate induced stromelysin activation whereas strontium compounds were ineffective. Strontium ranelate and SrCl₂ both strongly stimulated PG production suggesting an ionic effect of strontium independent of the organic moiety. Moreover, 10⁻³ M strontium ranelate increased the stimulatory effect of IGF-I (10⁻⁹ M) on PG synthesis but did not reverse the inhibitory effect of IL-1beta. Strontium ranelate strongly stimulates human cartilage matrix formation in vitro by a direct ionic effect without stimulating the chondroresorption processes. This finding provides a preclinical basis for in vivo testing of strontium ranelate in OA.

IT

System (Movement and Support); Pharmacology

IT Parts, Structures, & Systems of Organisms

cartilage: skeletal system; chondrocytes: skeletal system

IT Diseases

10533787

osteoarthritis: joint disease

Osteoarthritis (MeSH)

IT Diseases

osteoporosis: bone disease

Osteoporosis (MeSH)

IT Chemicals & Biochemicals

interleukin-1-beta; strontium ranelate [S12911]

RN 135459-87-9 (S12911)

L9 ANSWER 13 OF 13 IMSPRODUCT COPYRIGHT 2009 IMSWORLD on STN

SO Drug Launches, (20 Sep 1999)

CN Trade Name: PROTOS

CN Chemical Name: protoporphyrin IX disodium

TX Hepatic disorders caused cholecystitis or gall stones